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PATENT SPECIFICATION

Application Date: May 26, 1924. No. 12,876/24. **234,987**

Complete Left: Dec. 17, 1924.

Complete Accepted: June 11, 1925.

PROVISIONAL SPECIFICATION.

Improvements in or relating to Windows.

I, RICHARD REGIS GORDON-BARRETT, a British subject, of 48, Kingsbury Square, Aylesbury, Buckinghamshire, do hereby declare the nature of this invention to be as follows:—

This invention which relates to windows has for its object to eliminate the usual disadvantage of clouding of the glass due to condensation of steam or moisture which renders vision through it very difficult or impossible. Such clouding is due to the temperature of the glass being lower than that of the steam or moist air which is condensed, and in most cases one face of the glass is exposed to the atmospheric and the other face to the moist air of higher temperature.

My invention consists, broadly, in constructing a window of two separate glass panes collaterally arranged and spaced apart, the space between the two being sealed, such space containing air or having the air extracted to form a partial or complete vacuum.

In carrying out my invention, in one construction suitable for application to vehicles and conveyances, ships and so on, I provide a channel section frame of brass or other metal or other suitable material, the channel facing inwardly, a packing of rubber or similar resilient material being provided in said channel. Such packing has grooves to accommodate each of the glass panes being so shaped and formed as to securely grip each of said panes and provide a hermetic seal.

In a modification of the foregoing construction I may provide a rubber packing piece simply of channel section with a rib for separating the two panes, and provide a continuous or divided distance piece or fillets of glass or other suitable stiff or resilient material having its faces plain or coated or treated as found desirable. This last construction is particularly suitable in cases where it is desired to extract the air from the space between the panes.

The tendency for the window to become clouded is eliminated since the inner pane exposed to the steam or moist air is not exposed to the colder atmosphere at all but completely shielded therefrom by the outer pane.

Dated this 23rd day of May, 1924.

KINGS PATENT AGENCY LIMITED,
By BENJ. T. KING,
Director,
Registered Patent Agent,
146A, Queen Victoria Street, London, E.C. 4.
Agents for Applicant.

COMPLETE SPECIFICATION.

Improvements in or relating to Windows.

I, RICHARD REGIS GORDON-BARRETT, a British subject, of 48, Kingsbury Square, Aylesbury, Buckinghamshire, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to windows of the kind comprising two separate glass panes collaterally arranged and spaced apart and mounted in a metal or other

outer frame having interposed packings of rubber forming seating for the peripheral edges of the panes, the space between the panes being sealed from the atmosphere. Provision has been made in certain constructions of window of the said kind, for extracting the air from the space between the panes and creating a partial vacuum.

In previous proposals of the foregoing kind each of the two panes has been furnished with, and mounted in, its own separate rubber packing strip and one strip did not serve for the two panes. Each packing strip was accommodated in its own separate groove in the outer frame.

Windows consisting of double panes spaced apart by wood, paste-board or like strips inserted between them and permanently secured thereto by a soluble glass or similar cement are known.

The present invention is characterized mainly in that the two panes seat, at their peripheral edges, on to a continuous or divided rubber strip which is of a width sufficient to embrace the two panes and serves as a seating for both, said strip being housed in a channel section rigid outer frame.

The invention will be the more readily understood by reference to the accompanying sheet of drawings illustrating two alternative practical constructions of window in accordance therewith.

Referring firstly to the construction shown in Figure 1 which is specially suitable for application to vehicles and conveyances, ships and so on, I provide a channel section frame 1 of brass or other metal or other suitable material, the channel facing inwardly, a packing of rubber or similar resilient material 2 being provided in said channel. Such packing 2 which may be continuous or divided to form separate lengths, has grooves to accommodate each of the glass panes 3, 3 being so shaped and formed as to securely grip each of said panes and provide a hermetic seal. The upstanding integral rib 2^a of the rubber packing 2 constitutes a distance piece between the panes 3, 3.

In the modification shown in Figure 2 of the foregoing construction I provide a rubber packing piece 2 simply of channel section and provide a separate continuous or divided distance piece or fillets of glass or other suitable stiff or resilient material 4 having its faces plain or coated or treated as found desirable. This last construction is particularly suitable in cases where it is desired to extract the air from the space between the panes.

The frame 1 is suitably divided to permit insertion of the panes 3 and packing 2, and is subsequently joined after the whole is assembled.

The tendency for the window to become clouded is eliminated since the inner pane exposed to the steam or moist air is not exposed to the colder atmosphere at all but completely shielded therefrom by the outer pane.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A double-pane window of the kind set forth characterized in that the two panes seat, at their peripheral edges, on to a continuous or divided rubber strip which is of a width sufficient to embrace the two panes and serves as a seating for both, said strip being housed in a channel section rigid outer frame, substantially as herein described.

2. A window as claimed in Claim 1, wherein the rubber or like packing is grooved for the reception of the peripheral edges of the two panes, a distance piece consisting of an integral rib upstanding between the grooves, substantially as herein described.

3. In a window as claimed in Claim 1, the provision of a rubber packing strip of channel section which embraces the two panes in its channel, and a distance piece consisting of a separate strip of solid material interposed between the two panes, substantially as herein described.

4. A window constructed substantially as herein described with reference to Figure 1 of the accompanying drawings.

5. A window constructed substantially as herein described with reference to Figure 2 of the accompanying drawings.

Dated this 3rd day of December, 1924.

KINGS PATENT AGENCY LIMITED,
By BENJ. T. KING,
Director,
Registered Patent Agent,
146A, Queen Victoria Street, London, E.C. 4.
Agents for Applicant.

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[This Drawing is a reproduction of the Original on a reduced scale]

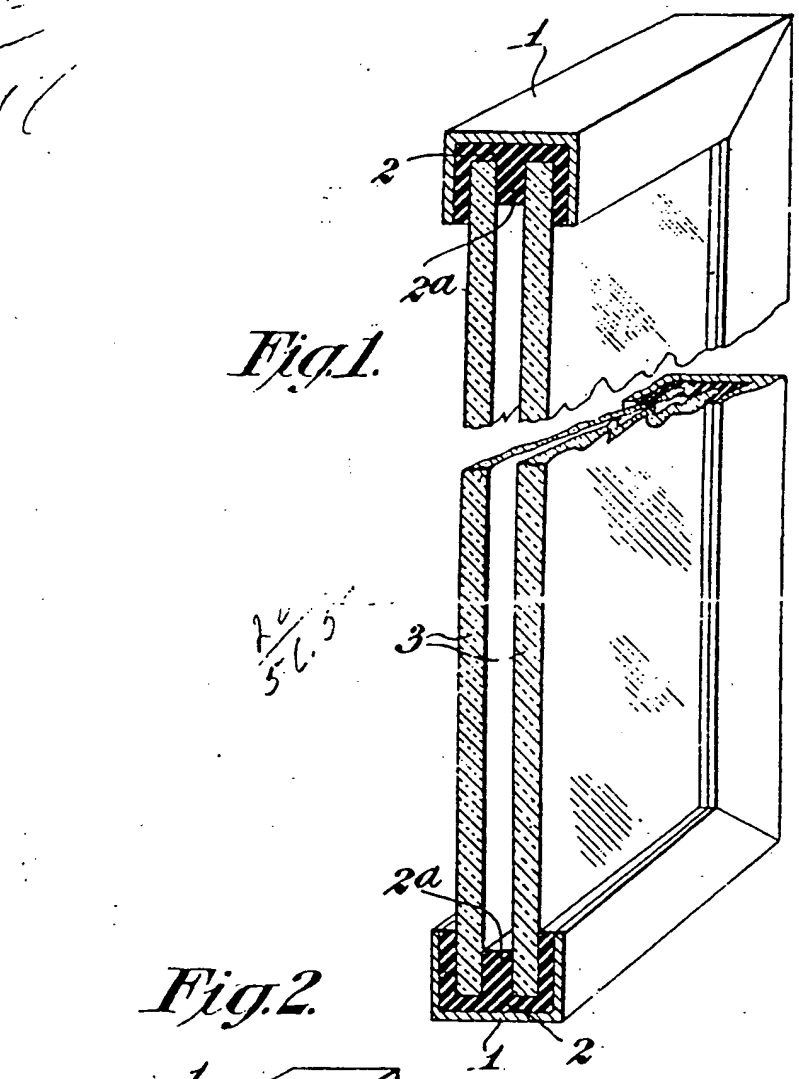
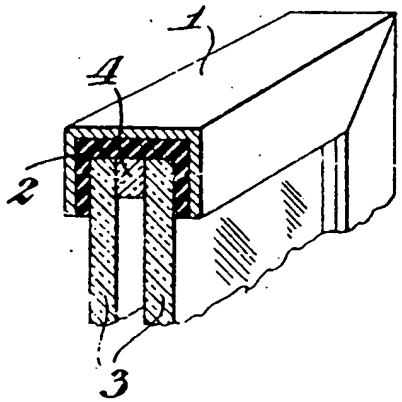


Fig.1.

Fig.2.



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